

Ion[®]

DIGITAL CAMERA



User's Manual

1. Introduction

Congratulations on purchasing the ION® Digital Camera. Using the latest innovations in technology the ION® Digital Camera offers fun, affordable and easy to use digital imaging.

Although you probably want to get started right away, please take a few minutes to read this guide and familiarise yourself with your new ION® Digital Camera. Your new ION® Digital Camera will take 26 High Resolution or 104 Low Resolution , which you upload to your PC (Personal Computer) running Windows® 98SE, Windows® Me, Window® 2000, XP or Macintosh® running OS 9.2 ~ X via the USB (Universal Serial Bus) port.

You can also use your ION® Digital Camera to capture not only snaps of your family and friends, but also video clips of them in action.

Your ION® Digital Camera can also be used as a Web Cam. If you have an internet connection and microphone (not supplied) you can chat face-to-face with friends and colleagues, conferencing in real time.

Please note that your images are stored on your ION® Digital Camera's internal memory. When you have taken your images, the ION® Digital Camera will wait for 30 seconds and then automatically switch to Stand-by mode, which draws a constant trickle of power from the battery. When the LCD display blinks, all stored images must have been uploaded and saved as otherwise they will be lost.

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3. System Requirements

For Windows® Users

PC

- Compatible with Microsoft® Windows® 98SE, Me, 2000 or XP
- Pentium® III 450MHz or equivalent processor
- 128MB RAM (512MB recommended)
- USB Port
- 500MB free disk space
- CD-ROM Drive
- Color Monitor with High Color (16-bit) graphic capability or higher
- Standard mouse and keyboard

For Macintosh® Users

MAC

- PowerPC® Processor
- Mac® OS Version 9.2 ~ X
- USB Port
- 96MB RAM (128MB recommended)
- 400MB Free disk space
- CD-ROM Drive
- Color Monitor with High Color (16-bit) graphic capability or higher
- Standard mouse and keyboard

4. Package Contents



ION® Digital Camera



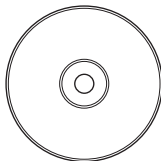
Quick Guide



USB Cable



2 x AAA Batteries



ION® Digital Camera CD-ROM includes
ION® Digital Camera Camera driver (PC & Mac),
Arcsoft® Software® Suite(PC & Mac),
Microsoft® NetMeeting™ (PC)
Adobe® Acrobat® Reader (PC & Mac)
User Guide in PDF format

5. Software Installation

- **Installing the Software**

PC

For Windows® Users:



IMPORTANT!

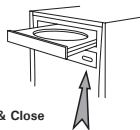
- Please backup all the necessary data before any driver and software installation.
- The CD-ROM is tested and recommended to use under English Windows OS.
- Please restart the computer after installing the software.



IMPORTANT!

It is necessary to install both of the ION® Digital Camera Camera Driver and the ArcSoft Software in order to transfer pictures to the computer. After the installation, please restart the Windows before connecting the camera to the PC.

1. Before you begin, close all other software applications open on your computer.
2. Insert the CD supplied into the computer CD-ROM Drive.
3. The CD User Interface Screen will automatically launch.
4. With the mouse, click on each software interface button in turn and follow the on screen instructions.



NOTE:

If the setup screen does not appear after loading the CD, then you can manually start it by double clicking the "My Computer" icon on your desktop, then double clicking the icon for the CD-ROM drive. When the CD-ROM window opens, double click the "INSTALL-E.EXE" icon.

For Macintosh Users:



1. Before you begin, close all other software applications opened on your computer.
2. Insert the CD supplied into the computer CD-ROM Drive.
3. Double click the CD-ROM icon "Digital Cam".
4. Install the software included.

- **Software included with your camera**

The ION® Digital Camera software CD contains the following software;

ION® Digital Camera Driver

Connect the camera to a computer and use the camera application to upload the pictures or continuous pictures to the computer.

PhotoStudio® 4.0 *Picture Editing Software*

PhotoStudio® 4.0 is a full-featured, easy-to-use digital image-editing program that provides a complete set of photo editing and retouching tools, plus a wide selection of special effects and enhancements. Its powerful features include a wide variety of input and output options, layers, multiple undo and redo functions, image management tools, editable text, multiple file format support and a lot more.

For further help on how to use PhotoStudio® 4.0, go to “Help” to access the Help Topics.

Visit <http://www.arcsoft.com> for all your FAQ’s, tips and technical support.

ArcSoft Funhouse™ 1.0 *Picture Editing Software*

ArcSoft Funhouse™ is an image entertainment application that enables users to create “photo fantasies” by combining their personal photos with a wide variety of fantasy backgrounds. Users can get their own images from digital cameras, scanners, disk drives and Photo CDs, and seamlessly combine them with just a few clicks of the mouse. The fantasy backgrounds include fictional characters, classic works of art, Olympic heroes, 50’s funnies, bathing beauties, muscle men and a lot more.

For further help on how to use ArcSoft Funhouse™ 1.0, go to “Help” to access the Help Topics.

Visit <http://www.arcsoft.com> for all your FAQ’s, tips and technical support.

ArcSoft PhotoPrinter® 2000 *Picture Printing Software*

ArcSoft PhotoPrinter® is an easy-to-use printing utility that enables the user to layout and print multiple images in different sizes quickly and easily on a single sheet of paper. The program offers a large selection of printing templates, including Kodak Digital Science Inkjet Photo Paper Templates and Avery-brand paper products. It also includes commonly used image-editing tools and a wide selection of templates for frames, edges and backgrounds for enhancing images.

For further help on how to use ArcSoft PhotoPrinter™ 2000, click the “?” on the top right hand corner to access the Help Topics. Visit <http://www.arcsoft.com> for all your FAQ's, tips and technical support.

ArcSoft VideoImpression™ 1.6 *Movie Making Software*

ArcSoft VideoImpression™ is an easy-to-use video and image editing software program. The program enables users to create and edit new videos using existing video and image files - making desktop video presentations for home, business, and the Web.

Microsoft® NetMeeting™ *Web Cam software*

NetMeeting™ provides the most complete conferencing solution for the Internet and corporate intranet. Powerful features let you communicate with both audio and video, collaborate on virtually any Windows-based application, exchange graphics on an electronic whiteboard, transfer files, use the text-based chat program, and much more. Using your PC and the Internet, you can now hold face-to-face conversations with friends and family around the world.

Adobe® Acrobat® Reader .PDF File Reading Software

Adobe® Acrobat® Reader lets you view and print Adobe Portable Document format (PDF) files on all major computer platforms, as well as fill in and submit Adobe PDF forms online.

6. Battery Installation

1. Slide right and then lift the battery door upwards (as shown on Diagram A). Insert the two new AAA alkaline batteries into the battery compartment (as shown on Diagram B). Make sure you follow the correct polarity (+) (-) as indicated.
2. Put the battery door on correct position and slide left to close the battery door (as shown on Diagram C).

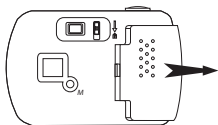


Diagram A

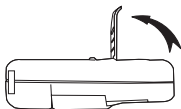


Diagram B

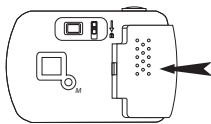


Diagram C



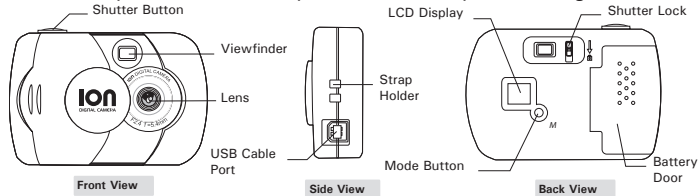
Important Note:

To avoid lost images when changing batteries, please make sure your images are uploaded to your PC or Mac before changing batteries.

Make sure the ION® Digital Camera is connected to your PC or Mac via the USB cable with your PC or Mac is switched on.

7. Getting to Know Your ION® Digital Camera

Refer to the picture below for a quick overview for your ION® Digital Camera.




• Shutter Button

The Shutter Button has 7 functions. Although these are covered in more detail later in this manual, please find below a brief description.


Still Image

To take an image, aim the ION® Digital Camera by looking through the viewfinder and press the Shutter Button once. A beep means you have taken an image. (see page 18)

Continuous images

To take continuous images, press and hold the Shutter Button to start taking continuous images when in the Continuous  Mode. (see page 19)

Self-Timer

To start the 10 second Self-Timer, simply press the Shutter Button when the ION® Digital Camera is in the Self-Timer  Mode. (see page 19)

Clear Memory

To clear single image or all images that you have taken, simply press the Shutter Button when you are in the Clear mode. (see page 20)

Change Resolution

The Shutter Button can be used to switch between Hi-Res and Low-Res settings. To do this, the memory must first be cleared, and the resolution option selected. (see page 20)

Change Compression

Choose different compressed format in different Resolution(see page 21)

Recording Video Clips

Use the Video mode to record video clips under different shooting environments (see page 22)

• Viewfinder

The viewfinder is the window you look through when you aim the ION® Digital Camera. Make sure you center the subject in the viewfinder before taking an image.



Important Note:

Due to the very small size of the viewfinder, ensure your ION® Digital Camera is perfectly parallel to the subject you wish to take an images of. We recommend images are taken at a minimum distance of 2 metres from the subject.

• LCD Display

By default, the 2 digit LCD screen displays the number of images remaining that can be taken before the ION® Digital Camera's memory is filled. It is also used in conjunction with the Mode Button to access and display the ION® Digital Camera settings.

20 Images Remaining

CL Delete last image

CA Delete all images

5t Self-timer Mode

HR High Resolution (Hi-Res) Mode

LR Low Resolution (Low-Res) Mode

CT Continuous Mode

CP Compressed Mode

NP Non-Compressed Mode

AI Video Mode

FS 50 HZ

FG 60 HZ



Low Battery Warning
(LCD will blink)

- **Mode Button**

The Mode Button has 2 primary functions:


Turning your ION® Digital Camera On from the Stand-by Mode

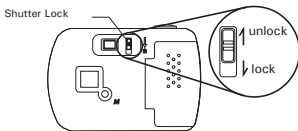
When your ION® Digital Camera is in Stand-by Mode, press the Mode button to reactivate.


Cycling Through the Operating Modes

You can also use the Mode Button to cycle through the operating modes of your ION® Digital Camera. (For more details, see 8.2 Getting Started)


- **Shutter Lock**

Shutter lock is designed to protect the settings of your camera. Therefore, when you have taken some pictures and want to protect them from being accidentally deleted switch the shutter lock switch to lock setting  .



When the shutter lock is set to  you will be able to scroll the mode settings using the mode button, but the shutter button will be non functional.

To release the lock, simply move the shutter lock upwards.

Images can be uploaded to your computer whilst the shutter lock is set to  . The auto power will still function when the shutter lock is ON.

- **Power**

Stand-by Mode


After a period of 30 seconds inactivity, the ION® Digital Camera will switch to Stand-by Mode automatically and the LCD will go blank. All images taken will not be lost as they are stored in the ION® Digital Camera's memory.



Important Note:

It is important to note that any images stored in your ION® Digital Camera's memory will be lost if the battery is totally drained or removed (and the USB cable is not connected to your ION® Digital Camera to your powered on PC or Mac). Please make sure your wanted images are uploaded to your PC or Mac via the USB cable before changing or installing batteries.

Low Battery

If the LCD display begins to blink or  is displayed, these are warnings that there is not enough power left in your battery to fully operate your ION® Digital Camera.



Important Note:

You must upload any stored images as soon as possible. Do not replace your battery before you have downloaded or saved your images to your PC or Mac.





Important Note:

To use as a web-cam, you will require Internet access. To talk and listen, your computer will require a sound card, speakers and microphone (not supplied).

8. Getting Started

- **Switching the ION® Digital Camera On**

Your ION® Digital Camera will automatically switch on when you insert new batteries or connect your ION® Digital Camera to your PC or Mac via USB port. Press the Mode Button to turn on your ION® Digital Camera when your ION® Digital Camera is in Stand-by Mode. The LCD will indicate the  mode for high resolution and it will also display the number of images which may be taken. Ensure the shutter lock switch is in the unlocked  position.

- **Sliding the Lens cover**

Before taking an image, remember to slide the lens cover outward. For maximum protection of the lens, remember to slide the lens cover inward after taking image.

• Taking an Image


Press the Shutter Button to take an image. The ION® Digital Camera will beep. A high pitched beep indicates that the image was taken successfully and the counter will count down. The LCD screen displays the number of available images remaining.

- A low beep indicates insufficient light to take an image or the lens cover has not been slide opened.
- A series of beeps indicates that the ION® Digital Camera is full. By pressing the Mode Button you can cycle through additional features as displayed on the LCD. When a given mode is displayed it can be accessed by pressing the Shutter Button (see section 7.1). If an option is not confirmed within 5 seconds the display will revert to show the number of available images that can be taken.



• Continuous Mode

To create continuous images:


1. Press the Mode Button until the  appears on the LCD.
2. Press and hold the Shutter Button within 5 seconds to start taking continuous images. When you are in Low-Res mode, the ION® Digital Camera will allow you to take 104 images. In Continuous Mode, the counter will rapidly decrease accompanied by a series of rapid beeps as each image is taken. If the Shutter Button is not pressed within 5 seconds the ION® Digital Camera will revert to the normal image taking mode.



Important Note:

During the Continuous Mode the ION® Digital Camera will allow images to be taken with insufficient light.

• Self-Timer Mode

To use the self-timer feature, press the Mode Button until  appears in the LCD then press the Shutter Button to start a 10 second self-timer. The ION® Digital Camera will issue a short beep every second and then a long beep just prior to a further short beep which indicates that the image has been successfully taken. It is a good idea to use the cradle for this.



Important Note:

The Self-Timer Mode cannot be selected when the ION® Digital Camera is full.

• Clearing the Stored Images **CL** or **CR**

Delete single image

1. Press the Mode Button until **CL** appears on the LCD.
2. Press the Shutter Button and the **CL** start flashing.
3. Press the Shutter Button again while **CL** is flashing. The last image taken will be deleted.

Delete all images

1. Press the Mode Button until **CR** appears on the LCD.
2. Press the Shutter Button and the **CR** start flashing.
3. Press the Shutter Button again to delete all images stored in your ION® Digital Camera.



Important Note:

All images will be lost when the memory is cleared. Please make sure you upload your wanted images before clearing your ION® Digital Camera's memory.

• Changing the Image Resolution **Hi** / **Lo**

Image resolution can be changed whenever you need.

1. Cycle through the Mode options by pressing the Mode Button.
2. Press the Shutter Button once to change to the alternative resolution.

For Example:

Changing from Hi-Res Mode to Low-Res Mode:-

Hi → **Lo** → **Hi** → **Lo** → **Hi** Press the Shutter Button to Confirm

Changing from Low-Res Mode to Hi-Res Mode:-

Lo → **Hi** → **Lo** → **Hi** → **Lo** Press the Shutter Button to Confirm

• Compression Modes CP

Compressed mode

1. Cycle through the Mode options until CP is displayed on the LCD.
2. Press the Shutter Button to apply your settings.

Non-compressed mode

1. Cycle through the Mode options until nP is displayed on the LCD.
2. Press the Shutter Button to apply your settings.

Below is the number of images that the camera can store, based on different resolution and compression modes:

units: images

Format	High Resolution	low Resolution
Compressed	78	312
Non-compressed	26	104

9. Recording Video Clips

• Recording Video Clips **RI**

Use the Video mode to record video clips:

1. Cycle through the Mode options until **RI** is displayed on the LCD.
2. Press and hold the Shutter button to start recording.
3. Press the Shutter button again to stop recording, or the Video recording stops when the internal memory is full.

• Choosing Video Frequency

You can select different video frequency for recording video clips under different light environment. Use **F5** when exposure light used is artificial and **F6** when exposure light used is natural.


1. Cycle through the Mode options until **F5** or **F6** is displayed on the LCD.
2. Press the Shutter button to apply your settings.

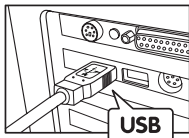
Important Note:

- The default setting for recording video clips is **F5** (50HZ).
- Recommend you select the right frequency before recording a video clip, Wrong frequency maybe result in video flickering.

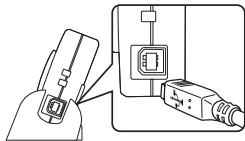
10. Connecting your ION® Digital Camera to Your Computer

The USB cable allows you to upload images from the ION® Digital Camera to your PC or Mac. One end of the cable connects to the USB port on the side of the ION® Digital Camera and the other end connects to your PC's or Mac's USB port. When your ION® Digital Camera is connected to your PC or Mac, it will draw power from the PC in order to preserve your battery life.

The USB port can be found on the front or back panel of your PC or Mac. Look for this  symbol next to the connection port. (Also see your PC or Mac operating manual for the location of your USB connection port.)



USB Series "A" Plug connects to your PC or Mac



USB Series "B" Plug connects to your ION® Digital Camera

When you first connect your ION® Digital Camera to your PC, a message appears on screen saying "New Hardware Found" and "Building Driver Information Database". After this, you can start to upload images!

11. Transferring, Managing Images and Capturing Live Video images

PC

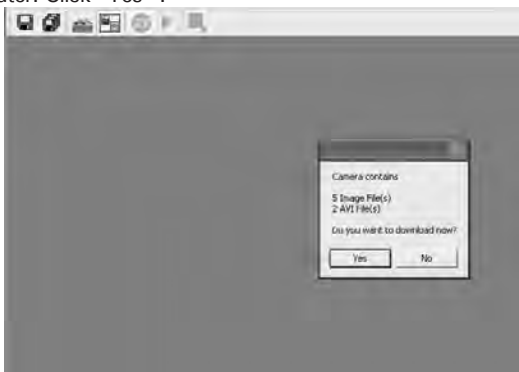
For Windows® Users:


- **Transferring, Managing and Capturing Live Video Images**

1. Click the Windows® Start Menu.
2. Select the “Digital Camera”.
3. Select the “Digital Camera”.



The system will recognize the images and video clips stored in your ION® Digital Camera automatically. And prompt you to download them to your computer. Click “Yes” .




4. Choose your desired image. Click “”. Select the path and format. Click “save”.



NOTE:

- Choose JPEG format, you can adjust image quality.
- We recommend you to save image as a JPEG format.

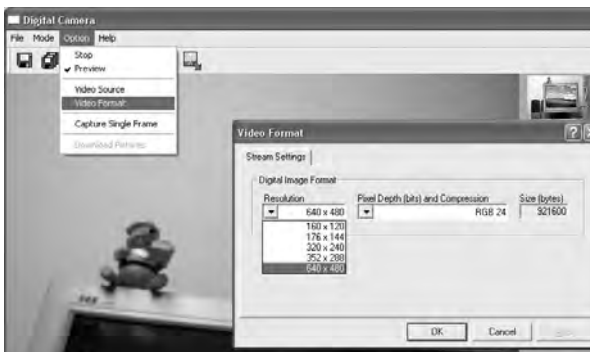
5. Click “”. Select the path and format. Click “Ok” to save all images and video clips in your ION® Digital Camera to the computer.



6. Go to “Option” and click “Video Source”. Select “VGA Dual-Mode Camera” as source. Click “ok”.





7. Go to “Option” and click “Video format”. Choose your desired setting. Click “ok”.



NOTE:

The default value: 640 x 480.

8. Click “” to enter live video mode. During this mode, Click “” for a snapshot.



NOTE:

- A captured image will be stored as a new file.
- Make sure you save the captured image before closing the window of Digital Camera application.

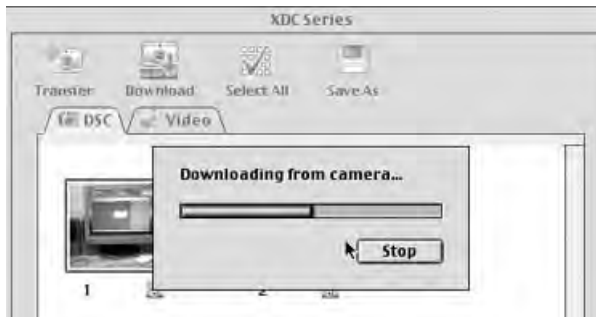
• Transferring Pictures and Capturing a live video image (for Mac OS9)

1. Connect your ION® Digital Camera to your computer via the USB cable.
2. Choose "XDC - 3XX" from "Applications". A window will prompt you how to do next step.

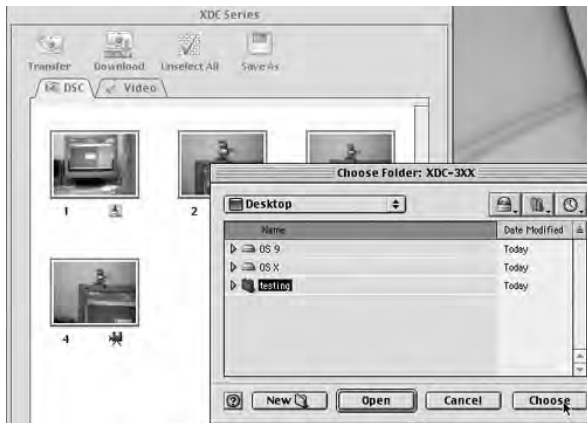


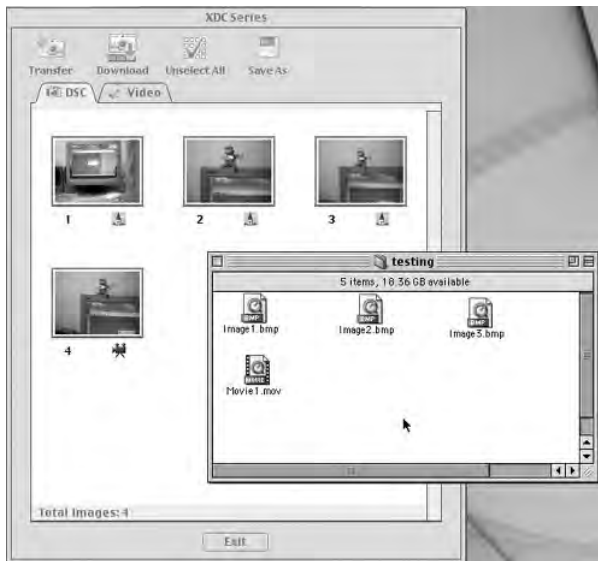


3. Click "Download" . All your images and video clips stored in your ION® Digital Camera will be transferred to the computer.

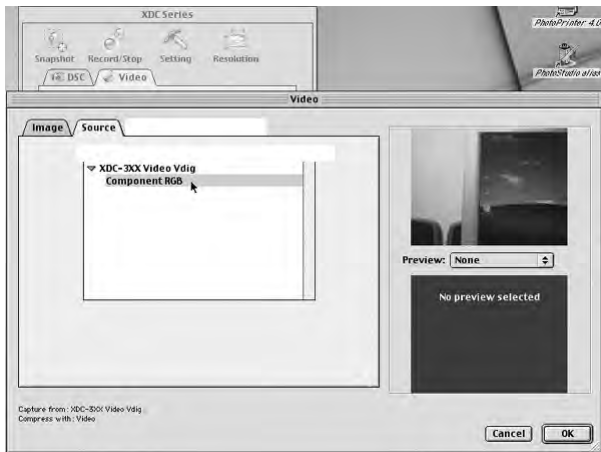


4. Choose your desired images or video clips. Click “save as”, A window appears. Select the destination folder, click “save” to save the images or video clips.





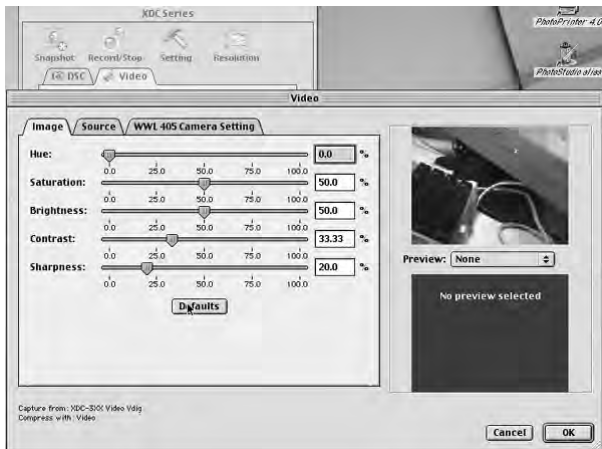
5. Select "Source", choose "XDC- 3XX Video Vdig", select "Component RGB".



6. Click "Video" to enter a live video mode, During This mode, click "Snapshot" to capture a image.



7. Click "Setting", select "image" to adjust the features of a video clip.




8. Click "Resolution", choose your desired setting.



NOTE:

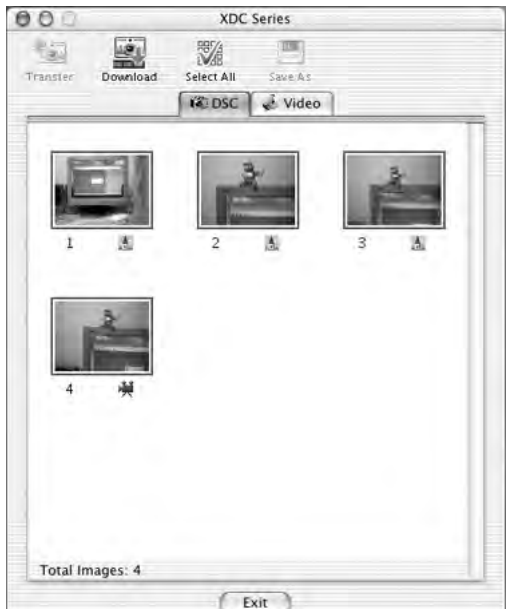
The default value: 320 x 240.

• **Transferring Pictures and Capturing a live video image (for Mac OSX)**

1. Connect your ION[®] Digital Camera to your Mac via USB cable.
2. Double Click an  icon from your computer desktop.
3. Double click “Applications”.



4. Double click "XDC - 3XX" and a window will pop up. The following steps are the same as the Mac OS9. Refer to page 31 to 39 for details.



12. Using the Camera as a Web Cam

For Windows® Users:

PC

• Setting up NetMeeting

1. Connect your ION® Digital Camera to the USB cable and MIC cable on one end.
2. Connect the USB cable to a USB port and connect the MIC cable to a MIC Jack on your PC on the other end.
3. Put your ION® Digital Camera on top of a flat surface.



NOTE:

- The microphone is integrated inside the camera.
- Recommend you select the right frequency before using your ION® Digital Camera as a PC camera. Wrong frequency maybe result in video flickering.

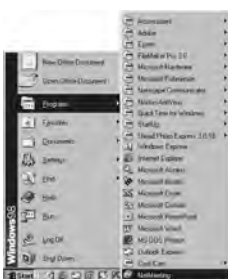
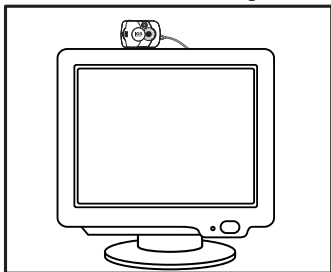
• Start NetMeeting



NOTE:

For Windows® XP/2000 users who use NetMeeting for the first time , Go to Start -> Run ->type in “conf” ->click “OK” and then follow the on-screen set up instruction to set up NetMeeting.

1. Double click the “NetMeeting” icon on the desktop or select the “NetMeeting” icon from the Windows Start Menu.
2. If you need further help on how to use Microsoft® NetMeeting™, select the “Help” under the manual bar and choose the topic you need. Or you can visit the following website: <http://www.microsoft.com/windows/netmeeting>.



13. Getting Help

• ION® Online Services

Website: <http://www.ion-camera.com>

If you have any problem or for any immediate assistance, please phone the hotline, send e-mail to the support email address or write to the address shown on the registration card enclosed.

• ArcSoft Software Help

For United States

ArcSoft HQ Support Center

(Fremont, CA 94538)

Tel.: 1-510-979-5599

Fax: 1-510-440-7978

E-mail: support@arcsoftsupport.com

Web: <http://www.arcsoft.com/en/support/>

For Latin America

E-mail: latinsupport@arcsoftsupport.com

For Europe

ArcSoft Europe Support Center

(Ireland)

Tel.: +353-(0) 61-702087

Fax: +353-(0) 61-702001

E-mail: eurosupport@arcsoft.com
support

For China

ArcSoft China Support Center

(Hangzhou)

Tel.: +86-571-88210575

E-mail: support@arcsoft.com.cn

Web: <http://www.arcsoft.com.cn/new/>

For Japan

ArcSoft Japan Support Center (Tokyo)

Tel.: +81-3-5795-1392

Fax: +81-3-5795-1397

E-mail: support@arcsoft.jp

Web: <http://www.arcsoft.jp>

For Taiwan

ArcSoft Taiwan Support Center (Taiwan)

Tel.: +886-(0) 2-2506-9355

Fax: +886-(0) 2-2506-8922

E-mail: support@arcsoft.com.tw

Web: www.arcsoft.com.tw

Visit <http://www.arcsoft.com> for technical support and frequently asked questions (FAQ's).

14. Troubleshooting

The troubleshooting guide is designed to help you. If problems continue, please contact your local customer support hot-line. See your registration card for helpline contact details.

For Windows® Users:

PC

Symptom	Solution	Problem
I receive an error message when I am installing the ION® Digital Camera Driver.	ION® Digital Camera Driver does not load.	Shut down all other applications and attempt to re-install the driver, or download the updated driver from www.ION-camera.com and install the updated driver. Check the USB controller in your BIOS if they are activated. If these does not work contact your national Customer Support representative.
All the images I have taken do not appear on the ION® Digital Camera.	You have lost power to your ION® Digital Camera by either:	
	Insufficient battery power	Upload all images to your PC as soon as possible. (please refer to Battery Guidance section in User's Manual.)
	Removing the battery without being connected to your PC (turned on) via the USB cable.	If you need to change batteries, and retain the images in your ION® Digital Camera's memory, ensure you are connected to a PC which is turned on via the USB cable, which will then draw power from the PC whilst you insert fresh batteries.
I cannot upload images to the PC	Connection failure	Check all cables connections are secured.
LCD display is flashing.	Battery power is too low to continue taking images.	Upload saved images immediately, then replace battery.
I cannot run the ION® Digital Camera.	Conflict with another camera driver capture device.	If you have any other camera installed on your computer, remove the camera and it's driver completely from your system to avoid conflict with another camera or capture device.
Black corner appears on the images taken.	Lost corner of images.	Make sure you slide the lens cover to the desired position.
I hear a low "beep" when trying to take an image.	Insufficient light.	Take your images in better light condition. Check your lens cover is open.
My CD Installation wizard does not work.	The auto installation file is switched to off. or The CD ROM is disconnected.	Go to the computer desktop. Right click on "My Computer". Click "Properties". Select "Device Manager". Double click on "CD-ROM", double click on "CD-R" (normally the manufacturer's name). Click on "Settings". Ensure "Auto insert notification" is ticked and the "disconnect" is ticked. If you change the settings the computer will ask you to restart your PC. Click "Yes".

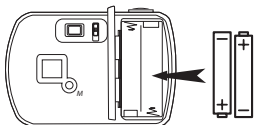
Symptom	Solution	Problem
I receive an error message when I am installing the ION® Digital Camera Driver.	ION® Digital Camera Driver does not load.	Shut down all other applications and attempt to re-install the driver, or download the updated driver from www.ion-camera.com and install the updated driver.
All the images I have taken do not appear on the ION® Digital Camera.	You have lost power to your ION® Digital Camera by either:	
	Insufficient battery power	Upload all images to your Mac as soon as possible. (please refer to Battery Guidance section in User's Manual.)
	Removing the battery without being connected to your Mac (turned on) via the USB cable.	If you need to change batteries, and retain the images in your ION® Digital Camera's memory, ensure you are connected to a Mac which is turned on via the USB cable, which will then draw power from the Mac whilst you insert fresh batteries.
I cannot upload images to the Mac	Connection failure	Check all cables connections are secured.
LCD display is flashing.	Battery power is too low to continue taking images.	Upload saved images immediately, then replace battery.
I cannot run the ION® Digital Camera .	Conflict with another camera driver capture device.	If you have any other camera installed on your computer, remove the camera and it's driver completely from your system to avoid conflict with another camera or capture device.
Black corner appears on the images taken.	Lost corner of images.	Make sure you slide the lens cover to the desired position.
I hear a low "beep" when trying to take an image.	Insufficient light.	Take your images in better light condition.
		Check your lens cover is open.

Please also refer to the help files & User Guides that accompany the enclosed applications. For further information and support, please visit our website: <http://www.ion-camera.com>

15. Battery Guidance

WARNINGS!

- Batteries should be replaced by an adult.
- Non-rechargeable batteries are not to be recharged.
- Only batteries of the same or equivalent type as recommended are to be used.
- Batteries are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the camera.
- The supply terminals are not to be short-circuited.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- Do not dispose the batteries in fire.
- Batteries are to be removed from the camera when not in use.
- Do not use rechargeable batteries.
- These instructions should be retained for future reference.



16. Technical Specifications

	VGA Camera Version
Memory	8 Mbyte SDRAM
Image Performance for Video on Web-cam	QVGA - 10 fps
Still Image	High Resolution - 640 x 480 pixel
	Low Resolution - 320 x 240 pixel
Storable Images	High Resolution - 26 images (Non-compressed) 78 images (Compressed)
	Low Resolution - 104 images (Non-compressed) 312 images (Compressed)

- Video Clip: unlimited when connected to the computer via video capture software
- File Format:
For Windows® Users (Still/Video Image - BMP or JPEG format)
For Macintosh® Users (Still/Video Image - BMP or PICT or MOV format)
- Interface: USB
- External Connector: USB
- Auto Power Off: after 30 seconds inactivity
- Power Supply: USB Port, 2 x AAA Batteries (included)
- Operating System:
For Windows® Users: Microsoft® Windows® 98SE, Me, 2000 or XP
For Macintosh® Users: Mac® OS Version 9.2 ~ X

This ION® Digital Camera should only be operated within the following environmental conditions:

- 32-104° Fahrenheit; 0-40° Celsius
- 20% - 85% relative humidity, non-condensing



Camera Cautions

- Never immerse any part of the ION® Digital Camera or its components into any fluid or liquid.
- Disconnect the ION® Digital Camera from your PC or Mac before cleaning it.
- Remove dust or stains with a soft cloth dampened with water or neutral detergent.
- Do not place hot items on the surface of the ION® Digital Camera.
- Do not attempt to open or disassemble the ION® Digital Camera. This will affect any warranty claim.

17. FCC Notice

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded cable must be used with this unit to ensure compliance with the Class B FCC limits.

US 0905

Part no.: OM3418US002